

DETAILED ACTION

1. This Office action is responsive to Applicant's reply filed on March 31, 2008.

Response to Amendment

2. The rejections of the claims under 35 U.S.C. 103(a) have been withdrawn in view of the amendments to the claims.

Response to Arguments

3. Applicant's arguments filed on March 31, 2008 have been fully considered and are persuasive in view of the amendments to the claims. The rejections of the claims have been withdrawn as noted above.

Examiner's Amendment

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to Applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Patrica Murphy (Reg. No. 55,964) on July 2, 2008.

5. The claims are amended, as presented below, to adopt the changes that Applicant's representative provided to the examiner on July 7, 2008 (see attached facsimile transmission). The amendments to the claims address issues of non-statutory subject matter under 35 U.S.C. 101 and distinguish the claims over the prior art of record.

IN THE CLAIMS

Please cancel claims 3, 4, 17, 29 and 30 and amend claims 1, 13, 23, 24, 25 and 26 as follows:

1. (Currently Amended) A system embodied on a computer readable medium, the system ~~that~~ facilitates installation and/or removal of components that includes at least one shared component, the system comprising:

a validation engine that provides a valid order, the order referentially consistent relative to each of the components; and

an installer that controls at least one of an install and removal operation of the components based on the valid order, the installer manipulates at least one property associated with the at least one shared component to reflect dependency for the at least one shared component relative to one or more other components that depend on the shared component

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according to the installation or removal thereof, the at least one shared component automatically subsumes one or more installation properties associated with previously installed shared components, the at least one property further comprises a reference count having a value indicative of a number of dependent components associated with the at least one shared component, dependency-related configuration data, or combinations thereof;

wherein at least one shared component being installed and configured for a selected dependent component during a first part of installation and at least one shared component for each dependent component other than the selected component is installed during the second part of the installation, the at least one shared component for each dependent component is at least an abbreviated version of the selected dependent component.

2. (Previously presented) The system of claim 1, the valid order identifies shared components for installation subsequent to non-shared components.
3. (Cancelled)
4. (Cancelled)
5. (Cancelled).
6. (Previously presented) The system of claim 1, the installer increases the value of the reference count for each installation of the at least one shared component.
7. (Previously presented) The system of claim 1, the installer decreases the value of the reference count in response to removal of a dependent component that depends on the at least one shared component.
8. (Previously presented) The system of claim 1, the at least one property further comprises configuration data that indicates an operating relationship of the at least one shared component and each installed dependent component associated with the at least one shared component.

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9. (Previously presented) The system of claim 1, the installer controls installation of the at least one shared component, such that a single set of files for the at least one shared component are copied as part of the installation for use by associated dependent components.

10. (Previously presented) The system of claim 9, the at least one shared component has associated metadata that identifies the at least one shared component as a shared component.

11. (Previously presented) The system of claim 10, the at least one shared component requires at least one dependent component to perform a substantially useful function.

12. (Previously presented) The system of claim 11, a runtime dependency exists between an installed dependent component and the shared component on which the dependent component depends.

13. (Currently Amended) A system that effectuates installation of components including at least one shared component, comprising:

a processor comprising:

_____ a setup manager that controls installation of the components;

_____ dependency manager that provides a valid installation order based on metadata associated with at least some of the components, the valid installation order generated to ensure that relative dependencies between the components are resolved prior to installation;

_____ the setup manager causes the components to be installed according to the valid installation order during a first part of the installation, a separate shared installation of the at least one shared component being implemented for each dependent component that depends on the at least one shared component during a second part of the installation, the separate shared installation is at least an abbreviated version of the at least one shared component, the separate shared installation comprises incrementing a reference count value indicative of a number of dependent components associated with the at least one shared component, and configuring

properties of the at least one shared component, which preserves properties associated with previously installed shared components.

14. (Previously presented) The system of claim 13, the dependency manager validates a received installation order, which, upon validation of the received installation order, becomes the valid installation order.

15. (Previously presented) The system of claim 14, when the received installation order is improper, the dependency manager creates the valid installation order.

16. (Previously presented) The system of claim 13, metadata associated with the at least one shared component identifies the at least one shared component as a shared component.

17. (Cancelled)

18. (Previously presented) The system of claim 13, further comprising at least one property associated with an installed instance of the at least one shared component that reflects dependency for the at least one shared component.

19. (Cancelled).

20. (Previously Presented) The system of claim 13, the setup manager controls the value of the reference count as a function of each installation and removal of the at least one shared component.

21. (Previously presented) The system of claim 13, the at least one property further comprises configuration data that indicates an operating relationship of the at least one shared component and each dependent component associated with the shared component.

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22. (Previously presented) The system of claim 13, the setup manager controls installation of the at least one shared component based on the valid installation order, such that a single set of program files for the shared component is copied as part of the installation.

23. (Currently Amended) A system embodied on a computer readable medium that facilitates installation and/or removal of components including at least one shared component, the system comprising:

a validation component that receives a list of components to be installed and/or removed and provides a valid order based on setup data, the validation component resolves all relative inter-component conflicts prior to installation and/or removal of components, the list of components to be installed and/or removed organized in an invalid order; and

a setup engine that initiates installation of each of the components according to the valid order during a first part of the installation, the shared component being installed for a first dependent component during the first part of installation, at least an abbreviated version of the shared component being installed for each other dependent component during a second part of the installation separate from the first part, the second part of the installation comprising incrementing a reference count value indicative of a number of dependent components associated with the at least one shared component, and configuring properties of the shared component, which automatically retains a property associated with a previously installed shared component.

24. (Currently Amended) A system that facilitates installation and/or removal of components including at least one shared component, comprising:

a computer readable medium having stored thereon:

_____ a dependency manager that receives a list of components to be installed and/or removed and provides a valid order based on setup data, the dependency manager ~~validation component~~ resolves all relative inter-component conflicts prior to installation and/or removal of the components, the list of components to be installed and/or removed organized in a random order;

_____ a setup engine that initiates installation of each of the components according to the valid order during a first part of the installation, the shared component being installed for a

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first dependent component during the first part of installation, at least an abbreviated version of the shared component being installed for each other dependent component during a second part of the installation, which is subsequent to the first part, a reference count value is maintained corresponding to a number of dependent components associated with the at least one shared component; the shared component being installed for the first dependent component acquires properties associated with a shared component previously installed and associated with the first dependent component, and

_____ a setup manager that manipulates at least one property associated with the at least one shared component to reflect dependency characteristics of the at least one shared component as a function of at least one of installation of the shared component and removal of a dependent component that depends on the at least one shared component.

25. (Currently Amended) A system that effectuates installation and/or removal of components including at least one shared component, comprising:

a computer readable medium having stored thereon:

_____ means for providing a valid order for the components, the valid order referentially consistent relative to each of the components;

_____ means for controlling installation of the components during a first part and a second part based on the valid order, a shared component is installed for a first dependent component during the first part and at least an abbreviated version of the shared component for each other dependent component is installed during the second part; and

_____ means for manipulating at least one property associated with the at least one shared component to reflect dependency for the at least one shared component relative to one or more dependent components that depend on the shared component based on at least one installation of the shared component and removal of a dependent component, prior to replacement of a currently installed shared component with the at least one shared component, the at least one shared component automatically acquires previously affixed installation properties associated with the currently installed shared component, the at least one property further comprises a dependency-related configuration data, a reference count value that indicates of a number of dependent components, or combinations thereof.

26. (Currently Amended) A method for installing and/or removing components including at least one shared component, the method comprising:

providing a valid order that is consistent relative to each of the components;

installing each of the plurality of components based on the valid order, a shared component being installed for a first dependent component during a first part of the installation and at least an abbreviated version of the shared component for each other dependent component that depends on the shared component being installed during a second part of the installation, which is separate from the first part;

incrementing a reference count value indicative of each of the plurality of components associated with the at least one shared component; and

modifying at least one property associated with the at least one shared component to reflect dependency characteristics of the at least one shared component relative dependent components that utilize the at least one shared component, the at least one shared component acquires existing installation properties of shared components that the at least one shared component supersedes on installation, the installation properties including a reference count having a value indicative of a number of dependent components associated with the at least one shared component, dependency-related configuration data, or combinations thereof.

27. (Cancelled).

28. (Previously presented) The method of claim 26, further comprising controlling the value of the reference count in response to each installation of the at least one shared component and removal of a dependent component that depends on the at least one shared component.

29. (Cancelled)

30. (Cancelled)

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31. (Previously Presented) A method to facilitate installing and/or removing components including at least one shared component, the method comprising:

- providing a valid order referentially consistent relative to each of the installed and/or removed components;

- effecting installation of each of the components during a first part of installation according to the valid order, the shared component being installed for a first dependent component during the first part of the installation;

- effecting installation of at least an abbreviated version of the shared component for each other dependent component during a second part of the installation separate from the first part, the shared component acquires one or more extant properties associated with a shared component made obsolete and removed by installation of the shared component; and

- manipulating at least one property associated with the at least one shared component to reflect dependency for the at least one shared component relative to at least one dependent component according to the installation or removal thereof.

Allowable Subject Matter

6. Claims 1, 2, 6-16, 18, 20-26, 28 and 31 are allowed.
7. The following is an examiner's statement of reasons for allowance:

The prior art of record does not teach or reasonably suggest, in the combinations and in such manner as recited in independent claims 1, 13, 23, 24, 25, 26 and 31, providing a valid order of components that includes at least one shared component, installing each component during a first part of installation based on the valid order, including installing the shared component for a first dependent component, and then installing at least an abbreviated version of the shared component for each other dependent component during a second part of the installation separate from the first part, such as reflected in the arguments filed on March 31, 2008 (see Applicant's remarks, pages 11-14).

8. Any comments considered necessary by Applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Yigdall whose telephone number is 571-272-3707. The examiner can normally be reached on Monday to Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on 571-272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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